



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

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Governor

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Commissioner

August 19, 2014

Mr. James Taylor
EH & S Manager
Plastic Packaging Corporation
1227 Union Street
West Springfield, MA 01089

RE: WEST SPRINGFIELD
Transmittal No.: X260921
Application No.: WE-14-015
Class: *SM-25*
FMF No.: 131223
AIR QUALITY PLAN APPROVAL

Dear Mr. Taylor:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Waste Prevention, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the VOC emissions associated with the cleaning operations at your plastic products manufacturing facility located at 1227 Union Street in West Springfield, Massachusetts ("Facility").

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

Plastic Packaging Corporation (hereinafter “PPC or The Permittee”), located at 1227 Union Street, in West Springfield is a manufacturing company primarily engaged in the manufacture of plastic containers and lids used for the food service and food processor markets. The PPC facility was recently purchased by Placon, a North American designer and manufacturer of custom and stock thin gauge thermoformed plastic clamshells, trays, and blisters for retail, food and medical device packaging markets. Placon conducted environmental due diligence at the PPC facility prior to its purchase, including a review of environmental regulatory compliance issues. During this review it was discovered that the PPC facility did not have an Air Emissions Plan Approval for volatile organic compound (“VOC”) fugitive emissions associated with cold solvent cleaning of products and equipment. Placon submitted a disclosure pursuant to MassDEP’s Policy on Incentives for Self-Policing (Policy ENF-07.002 dated May 1, 2007) with respect to PPC’s non-compliance and submitted a Limited Plan Application.

The plastic containers manufactured at PPC are formed through injection molding of clear and colored polypropylene (“PP”), high density polyethylene (“HDPE”), linear low density polyethylene (“LLDPE”), and polyethylene terephthalate (“PET”) pellets. The raw material pellets are primarily delivered to the site via rail and stored in the rail cars or transferred to one of five exterior silos (ranging in capacity from 140,000 to 180,000 pounds each). Pellets are then conveyed pneumatically from the silos (or to a smaller extent from Gaylord boxes) to interior hoppers which mix the pellets. The mixed pellets are again conveyed pneumatically via overhead lines to one of fourteen (14) injection molding presses. Melting of the plastic raw materials in the presses is accomplished using electric heaters. The molded containers are then packed and shipped or taken to the print department for printing or label application.

Printing operations include eight (8) flexographic printing presses capable of applying between 4 and 10 colors on a press. The container’s exterior surface is heated using natural gas fired flame prior to printing using UV-cured, low VOC inks. PPC also operates one label machine which applies purchased pre-printed labels.

For product quality, molded containers are cleaned manually using wipes wetted with isopropanol. Conveyors, rollers and other molding equipment components are also cleaned using wipes wetted with isopropanol. The wipes dry through evaporation during use. When wipes become unfit for continued use, the dry wipes are disposed of as solid waste.

Printing equipment such as rollers and ink pans are cleaned using a petroleum distillate cleaner (Powerklene). Like isopropanol, Powerklene is used on wetted wipes. However, unlike the isopropanol wipes, which dry through evaporation during use, spent Powerklene wipes are collected in covered containers and sent to a commercial laundry for cleaning and recycling. This is due to the low vapor pressure of Powerklene (3mm Hg @20 °c). Best management practices are employed to minimize the amount of Powerklene lost as fugitive emissions. Plunger cans are used to dispense to a dasher pan used to moisten cleaning wipes. The brass dispenser valves are

self-closing to minimize spills and control excess cleaner from being dispensed. A perforated pan screen allows surplus liquid to drain back into the cans reservoir, minimizing evaporation of solvents. Spent wipes containing petroleum distillate are managed in compliance with Policy BWP-94-015: *Policy for Industrial Wipers Contaminated with Solvents*.

The facility is heated using 10 natural gas fired space heaters with a total energy input rating of less than 3 million BTUs per hour. Ancillary operations include warehousing of finished product, maintenance of site machinery, and repair of injection molds.

Facility-Wide Emission Rates

Plastic Packaging Corporation has requested to establish a facility-wide emission limit of 9.9 tons of VOCs in any 12 consecutive month period and 1.0 tons of total HAPs in any 12 consecutive month period.

Regulatory Applicability

The 14 plastic injection molding machines are exempt from Plan Approval under 310 CMR 7.02(2)(b)19 Exemptions from Plan Approval (Molding). The 8 printing presses are exempt from Plan Approval as *De minimus* sources under 310 CMR 7.02(2)(b)7., based on the use of UV-cured inks and the absence of conventional drying capabilities on the presses. The total heat input rating of the natural gas fired heaters and equipment is less than 3 million BTUs per hour with emissions well below 1 ton per year. The heaters are exempt from Plan Approval under 310 CMR 7.02(2)(b)(15) Fuel Utilization Facilities due to heat input capacity.

PPC proposes the use of a combination of best management practices, pollution prevention and a limitation on the hours of operation and /or raw material usage. PPC will minimize VOC and HAP emissions from their operations by limiting the VOC and HAP contents of coatings/materials, limiting the usage of VOC and HAP-containing coatings/materials and implementing work practices which minimize the evaporation of VOCs and HAPs

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
1	Hand-wipe cleaning with isopropanol	N/A	None
2	Hand-wipe cleaning with petroleum distillate	N/A	None

Table 1 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit ⁽¹⁾
1	455 Gallons per month/ 3000 Gallons per year	VOC ⁽²⁾	1.5 TPM 9.9 TPY
2	75 Gallons per month/ 750 Gallons per year ⁽⁴⁾	VOC ⁽³⁾	0.2 TPM 2.0 TPY
		HAP ⁽³⁾	0.1 TPM 1.0 TPY
Facility- wide	None	VOC	1.6 TPM 9.9 TPY
		HAP	0.1 TPM 1.0 TPY

Table 2 Key:

EU# = Emission Unit Number

VOC = Volatile Organic Compounds

Lb VOC/Gal. = Pounds VOC per Gallon

HAP (single) = maximum single Hazardous Air Pollutant

HAPs (total) = total Hazardous Air Pollutants.

TPM = tons per month

TPY = tons per consecutive 12-month period

Table 2 Notes:

¹ = Emission limits expressed as tons per month (TPM) or tons per year (TPY) are based on a rolling 12-month total.

² = The VOC emissions from EU #1 assumes 100% of the weight of isopropanol purchased. This assumes 100% of the VOC contained is emitted due to volatility.

³ = The VOC emissions from EU #2 is calculated using 75% of the weight of petroleum distillate purchased. This assumes that 75% of the purchased material is emitted and the remaining 25% is shipped off-site in the industrial wipes laundered for recycling. *(Based on EPA volatilization model & 6-month study by PPC)*

⁴ = Based on Powerklene WM Special usage only. If at a future date a lower VOC petroleum distillate is found that can replace Powerklene as a product cleaning agent, Plastic Packaging Corp. shall request an operational limit change from MassDEP prior to any increases in the usage rate.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements
1&2	1. The Permittee shall monitor material usage on a monthly basis such that records can be maintained of the Facility's emissions of VOCs and HAPs to determine compliance with the emission limits in Table 2 above.
Facility-wide	2. The Permittee shall establish and maintain a calendar month record of all solvents and petroleum distillates used and the manufacturer's formulation data used for determining VOC content.
	3. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	4. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13

Table 3 Key:

EU# = Emission Unit Number

VOCs = Volatile Organic Compounds

HAPs = Hazardous Air Pollutants

MassDEP = Massachusetts Department of Environmental Protection

USEPA = United States Environmental Protection Agency

Table 4	
EU#	Record Keeping Requirements
1	1. The Permittee shall maintain purchase and inventory records of isopropanol sufficient to demonstrate compliance with the limits contained in this Plan Approval.
2	2. The Permittee shall maintain purchase and inventory records of petroleum distillate sufficient to demonstrate compliance with the limits contained in this Plan Approval
1 & 2	3. The Permittee shall prepare and maintain monthly records sufficient to demonstrate compliance with the limits contained in this Plan Approval. Such records shall include, but are not limited to; identity, quantity, formulations of any clean-up solvent(s) used.

Table 4	
EU#	Record Keeping Requirements
Facility-wide	4. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at: http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping .
	5. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	6. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.
	7. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	8. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	9. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	10. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure

USEPA = United States Environmental Protection Agency

Table 5	
EU#	Reporting Requirements
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	2. The Permittee shall notify the Western Regional Office of MassDEP, BWP Permit Chief by telephone (413) 755-2115 , email, <i>Marc.Simpson@state.ma.us</i> or fax (413) 784-1149 , as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Permit Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	3. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval. Pursuant to 7.12(1)(a)7., the Permittee is required to file Source Registration as a condition of this Plan Approval.
	4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.
	5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number

CMR = Code of Massachusetts Regulations

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
2	1. Spent wipes containing petroleum distillate will be managed in compliance with Policy BWP-94-015: <u>Policy for Industrial Wipers Contaminated with Solvents</u> .
	2. Spent wipes containing petroleum distillate that are not managed in accordance with Policy BWP-94-015: <u>Policy for Industrial Wipers Contaminated with Solvents</u> , will be managed as hazardous waste in accordance with 310 CMR 30.000.
1 & 2	3. The Permittee shall: <ul style="list-style-type: none"> a. keep all cleanup solutions in covered containers during transport and storage; b. keep shop towels contaminated with cleanup solution, when not in use, in covered containers; and c. maintain records of cleanup solution VOC and HAP content and usage to demonstrate compliance with Table 2 requirements of this Approval.
Facility-wide	4. Pursuant to the best available control technology provision of 310 CMR 7.02(8)(a)2, the Permittee shall comply with the following work practices: <ul style="list-style-type: none"> a. Store all VOC and/or HAP-containing materials, process-related waste materials and fresh and spent cleaning solvents in closed containers; b. ensure that mixing and storage containers used for VOC and/or HAP-containing materials and process-related waste materials are kept closed at all times except when depositing or removing these materials; c. minimize spills of VOC and/or HAP-containing materials and process-related waste materials; d. convey VOC and/or HAP-containing materials and process-related waste materials from one location to another in closed containers or pipes; e. minimize VOC and/or HAP emissions from cleaning of application, storage, mixing, and conveying equipment by ensuring that: (i) equipment cleaning is performed without atomizing the cleanup solvent; and, (ii) all spent solvent is captured in closed containers; and f. store and dispose of all absorbent materials, such as cloth or paper, that are contaminated with VOC and/or HAP-containing materials and process-related waste materials in non-absorbent containers that shall be kept closed except when placing materials in or removing materials from the container.

Table 6	
EU#	Special Terms and Conditions
	5. Opacity, exclusive of uncombined water, shall not exceed 10% at all times during all modes of operation, including startups and shutdowns. Visible emissions or opacity which exceeds the limits set forth in this Approval shall be reported to MassDEP in writing or by fax within three (3) business days of the occurrence.
Facility-wide (cont')	6. Noise from the facility during routine operation, including startups and shutdowns, shall not exceed MassDEP noise guidelines and shall not cause a condition of air pollution as defined in 310 CMR 7.01 and 7.10.
	7. The facility shall be constructed and operated in a manner to prevent the occurrence of dust and odor conditions which cause or contribute to a condition of air pollution as defined in 310 CMR 7.01 and 7.09.
	8. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Facility shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.

Table 6 Key:

EU# = Emission Unit Number

BWP = Bureau of Waste Prevention

CMR = Code of Massachusetts Regulations

VOC = Volatile Organic Compound

HAP = Hazardous Air Pollutant

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A

Table 7 Key:

EU# = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or

town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Todd Wheeler by telephone at (413) 755-2297, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Marc Simpson
Permit Chief
Bureau of Waste Prevention

Enclosure

ecc: MassDEP/Boston - Yi Tian
MassDEP/WERO - Roberta Baker
MassDEP/WERO - Peter Czapienski
O'Reilly Talbot & Okun, Assoc. – James Gagnon